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**Policy Brief**  
**Private and Government Fiscal Costs and Benefits**  
**of the Maryland Dream Act**

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**Introduction<sup>2</sup>**

The Maryland Dream Act<sup>3</sup> allows undocumented immigrants who graduate from Maryland high schools and meet certain additional conditions to pay in-county/in-state tuition at Maryland community colleges and public universities (see Box 1). Specifically, under the Dream Act eligible students who begin their higher education at a Maryland public community college pay the in-county tuition rate if they are residents of the service area of the community college that they attend. After completing an associate's degree, or 60 credits (two years full-time study) at a

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<sup>2</sup> This policy brief summarizes the results of a larger study by Gindling and Mandell, "Private and Government Fiscal Costs and Benefits of the Maryland Dream Act."

<sup>3</sup> The Dream Act was passed by the General Assembly in 2011. However, a petition drive collected enough valid signatures to bring about a veto referendum on the Dream Act. Maryland voters will vote yes or no on the Maryland Dream Act in the November 6, 2012 election.

community college, students can then continue their higher education at a Maryland public university or college at in-state tuition rates.

#### **BOX 1: The Maryland Dream Act**

To qualify for the Dream Act, an undocumented immigrant must fulfill the following conditions:

- Attend a public or nonpublic secondary school in the state for at least three years (beginning no earlier than the 2005-2006 school year);
- Graduate from a secondary school, or received the equivalent of a high school diploma, in Maryland no earlier than the 2007-2008 school year;
- Provide documentation that the student or the student's parent or legal guardian has filed a Maryland income tax return for at least three years while the student was in high school, and for any year during the period since high school graduation;
- Register at a community college within four years of high school graduation;
- Begin, or have begun, higher education at a Maryland public community college no earlier than the Fall 2010 semester. Comply with the registration requirements of the selective service system;
- File an application to become a permanent resident within 30 days of becoming eligible to do so.

Several issues are critically important in judging the desirability of in-state tuition for undocumented immigrants. One of these issues, which has been largely absent from public deliberations to date regarding the desirability of the Dream Act, is its net economic impacts.

This policy brief begins to fill this void by presenting the results of an evidence-based cost-benefit analysis of the Maryland Dream Act. It addresses the following three questions: (1) how many students benefit from the Dream Act; (2) what are the total net economic impacts of the Dream Act; and (3) what are the fiscal costs and benefits to the State, county and federal governments of the Dream Act?

The estimates from this analysis suggest that the net economic effect of the Maryland Dream Act will be positive, and the benefits will be substantial. Even if the only consideration is the fiscal effects on state and local governments, the impact of the Dream Act will be positive. The initial costs of the investment in education will be more than offset by increased tax revenues and lower government spending on incarceration and other government programs that result from a more educated citizenry.

### **Methodology**

Our analysis is based on distinguishing between two broad categories of students who take advantage of the Dream Act, namely:

- A. Undocumented immigrant students who obtain more education because the Dream Act lowers the cost of education to them, and
- B. Undocumented immigrant students who would obtain the same education with or without the Dream Act, but who pay lower tuition and fees at public universities because of the Dream Act.

Within each of these broad categories, several subcategories can be identified (see Box 2).

**BOX 2: Categories of Students Who Can Take Advantage of the Dream Act**

- A. Undocumented immigrant students induced by the Dream Act to obtain more education:
  - 1. Because higher education becomes less expensive, students will be more likely to want to obtain higher education. Because a prerequisite for admission to college is a high school degree, the Dream Act will induce some high school students who would have dropped out without the Dream Act to graduate from high school.
  - 2. A student who would not have gone to college or university without the Dream Act might enter college but not complete a 4-year degree.
  - 3. A student who would not have gone to college or university without the Dream Act might enter and complete college, receiving a 4-year university degree (i.e. BA, BS, etc.).
  - 4. A student who would have gone to college but not completed a 4-year degree without the Dream Act might complete a 4-year university degree because of the Dream Act.
- B. Undocumented immigrant students who do not obtain more education because of the Dream Act, but costs shift between the student, state and county governments:
  - 5. Students who would obtain an Associate's degree from a Maryland community college without the Dream Act, who still obtain only an Associate's degree with the Dream Act.
  - 6. Students who would obtain a 4-year degree from a Maryland public university without the Dream Act, who, with the Dream Act will spend two years in public community college and then graduate from a 4-year Maryland public university.
  - 7. Students who would have obtained a 4-year degree from a private or out-of-state public university without the Dream Act, who, with the Dream Act will spend two years in a public community college and then graduate from a 4-year Maryland public university.

Our estimates of the number of students in each category are based on:

- Existing empirical studies of the effects of in-state tuition laws in other states (Kaushal, 2008; Flores, 2010; Dickson and Pender, 2010) as well as the broader literature on the effects of state policies that influence the amount students are required to pay for higher education on educational attainment;
- Estimates of the number of undocumented immigrants of high school age in Maryland based on published data from the Pew Hispanic Center<sup>4</sup>; and
- Current enrollment rates of such youth.

The Dream Act is likely to have a variety of economic impacts upon those who take advantage of it, as well as on federal, state and local governments and society as a whole. Private costs of the Dream Act to students include the tuition and fees paid by those who would not have gone to school without the Dream Act, plus the earnings foregone because these students are in school and not working. Private benefits to students from the Dream Act include the higher post-tax earnings, fringe benefits, better job satisfaction and better health that result from more education. However, because of measurement difficulties, the only private benefit that we consider in this analysis is higher post-tax earnings. To the extent that there are other private benefits to students, this study underestimates the true private net benefits of the Dream Act.

Costs to local, state and federal governments increase when students obtain more education at public institutions because these governments subsidize students in high schools, community colleges and universities. In this study, fiscal costs to the different types governments are measured as the per student subsidies going to the high schools, community colleges or 4-year universities.

The fiscal benefits of the Dream Act include the increased income tax revenue, increased sales tax revenue, and increased property tax revenue that occur because more-educated individuals earn higher incomes. In addition, because more educated individuals are less likely to commit crimes and be incarcerated, are less likely to receive income support (welfare), and are less likely to receive Medicare or other government health care subsidies, fiscal benefits should also include the reduction in public spending in these areas. However, because of the difficulties with measuring other fiscal benefits, the estimates presented in this study only include increased income tax revenue, increased sales tax revenue, and reduced spending on incarceration. To the extent that there are other fiscal cost savings from a more educated citizenry, this study underestimates the net fiscal benefits of the Dream Act. Even without including these additional

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<sup>4</sup> To benefit from the Maryland Dream Act, a student must begin, or have begun, higher education at a Maryland public community college no earlier than the Fall 2010 semester. This means that many students who are already attending a community college or university in Maryland are not eligible for the Dream Act. Thus, we focus our analysis on the cohort of 18 year old undocumented immigrants in each year.

likely fiscal benefits in our estimates, we still find that the net fiscal benefits of the Dream Act to the state, county and federal governments are positive.

All costs and benefits are reported in 2011 discounted dollars. In addition, to take into account that individuals and governments may value a dollar in the future less than they value that dollar today, all future costs and benefits are discounted to the first year of college using a discount rate of 3 percent.

## **Results**

The results of the analysis for a one-year cohort of students are summarized in Tables 1, 2 and 3.

### How many students benefit from the Dream Act? (Table 1)

- About 185 students in each annual cohort will be induced to graduate from high school because of the Dream Act.
- A total of 435 students in each annual cohort will take advantage of the Dream Act to attend college. Of those who attend college, 163 are induced by the Dream Act to obtain more college education, while 272 pay less for each year of college with the Dream Act than they would have in the absence of the Dream Act, but do not increase their educational attainment.<sup>5</sup>

### What are the total net economic impacts of the Dream Act? (Table 2)

- For most categories of students who take advantage of the Dream Act, the estimated total net fiscal plus private benefits are not only positive but large. The estimated total net benefits to the economy of each annual cohort of students who take advantage of the Dream Act are approximately \$66 million in 2011 dollars.

### What are the fiscal costs and benefits to the state, county and federal governments of the Dream Act? (Table 3)

- For students who obtain more education because of the Dream Act, there are net fiscal benefits for all levels of government (state, local and federal) as well as private net benefits. For students who benefit from the Dream Act but do not obtain more education, costs shift among the student, and county, state and federal governments, leading to

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<sup>5</sup> These estimates imply that, at any point in time, students who benefit from the Dream Act will make up 0.6% of total number of students in Maryland public colleges and universities. This is consistent with the number of students who have taken advantage of existing in-state tuition laws in other states, after we take into account the different number of undocumented immigrants in those states compared to Maryland.

positive net private benefits as well as positive net total (fiscal plus private) benefits, but negative net fiscal impacts for the state and local governments combined. The total fiscal costs and benefits of the Dream Act will depend on the number of students who obtain more education because of the Dream Act relative to those who benefit but do not obtain more education because of the Dream Act.

- For each annual cohort of students who benefit from the Dream Act, the estimated total fiscal costs to governments of additional schooling induced by the Dream Act are approximately \$3.6 million for the Maryland state government, \$3.6 million for county governments and \$200,000 for the federal government. However, as shown in Row 2 of Table 3, the initial costs of the investment in education will be more than offset by increased tax revenues and lower government spending on incarceration and other government programs that result from a more educated citizenry. Consequently, as shown in Row 3, the total net fiscal benefits of the Dream Act for each annual cohort of students are estimated to be close to \$24.6 million. Of this \$24.6 million, approximately \$6.2 million will accrue to the State government of Maryland and to Maryland county governments and \$18.4 million will accrue to the federal government. While these estimates are based on a number of parameters that are imprecisely estimated, the basic result is robust and remains qualitatively unchanged when underlying assumptions are varied.

### **Other Potential Economic Impacts**

Several types of impacts are not included in our net benefit calculations. First, due to the difficulty in obtaining an estimate of their magnitude and economic value, several beneficial impacts of increased educational attainment are excluded, including increased property taxes, fringe benefits, job satisfaction, health status and civic participation as well as reductions in crime, TANF, and Medicaid enrollment. As a result of these omissions, our estimates of the benefits of the Dream Act are likely to be conservative and understate the net benefits of the Dream Act.

Our analysis does not include “crowding-out effects,” i.e., reductions in the educational attainment of citizens due to undocumented immigrants being awarded a larger fraction of a fixed number of “slots” at public community colleges and universities (i.e. Camarota, 2010). Several factors suggest that “crowding-out effects” will not occur in Maryland. The first is that students taking advantage of the Maryland Dream Act must spend the first two years of higher education at a public community college. Maryland public community colleges have open access admission policies and admit anyone who meets minimal admissions requirements. Therefore, additional undocumented immigrant students admitted to Maryland public community colleges will have no impact on the probability that other students will or will not be admitted. In

addition, because students who take advantage of the Dream Act are required to begin higher education at community college, the Dream Act will not have a negative impact on the number of citizens admitted as freshman to 4-year public universities (if anything, it will open up additional space). It is also unlikely that the Dream Act will have an effect on the number of citizens transferring to 4-year public universities from community colleges, as Maryland public 4-year universities have guidelines that require them to accept all community college transfers who meet minimum requirements. Finally, we estimate that the number of additional students transferring from community colleges to public 4-year universities in Maryland because of the Dream Act will be small—102 students per year. This is about 0.1 percent of the 117,187 students enrolled at Maryland public universities in 2012.

Reductions in tuition paid by those who take advantage of the Dream Act will result in lost revenue to Maryland community colleges and universities. However, this lost revenue to colleges and universities will not directly translate into an increase in state or county government spending (subsidies). Hence, it is not included in our estimate of the net private plus fiscal impacts of the Dream Act. For community colleges, the Dream Act will result in an increase in revenue because the additional state subsidy is greater than the lost tuition revenue. For 4-year universities, the Dream Act results in lost revenue because there is a tuition loss but no additional state subsidy due to the Dream Act. Universities may react to this fall in revenue by reducing the number of classes or other services offered to students or by raising tuition, both of which would impose costs on students. However, the lost tuition revenue will be relatively small. We estimate that all 12 state universities will experience a total drop in revenue of approximately \$1.8 million for each cohort, which represents 0.1% of total tuition and fee revenue at public universities in Maryland. Even if we count lost tuition revenue as an explicit cost in our calculations, net economic benefits are still positive for all categories that are affected.

Finally, the fiscal costs of the Maryland Dream Act may be higher if it makes Maryland a more attractive destination for undocumented immigrants and their families. These families might result in greater spending on public services such as police, fire and K-12 education. However, there is little empirical evidence that undocumented immigrants are attracted to states and localities with more generous public benefits (i.e. Kaushal, 2005; Damm, 2009).<sup>6</sup> Further, because of the restrictions imposed by the Maryland Dream Act, moving to Maryland to take advantage of the Act would require several years of planning on the part of the parents of undocumented immigrant children. The family would need to decide at least three years before high school graduation to move to Maryland, and once in the state would need to make sure that the student spent a minimum of three years in, and graduated from, a Maryland high school (as well as paying state and federal income taxes for all years).

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<sup>6</sup> These studies do find that publicly provided benefits have an impact on the location decisions of those classified as refugees.

## Conclusions

As the first attempt of which we are aware to estimate the economic impacts of the Maryland Dream Act, this policy brief makes several contributions. On a conceptual level, it highlights the two broad categories of students who would take advantage of the Dream Act, namely:

- Undocumented immigrant students who obtain more education because the Dream Act lowers the cost of education to them, and
- Undocumented immigrant students who would obtain the same education with or without the Dream Act, but who pay lower tuition and fees at public universities because of the Dream Act.

Furthermore, it highlights that by increasing educational attainment, the Dream Act will increase lifetime earnings of beneficiaries, as well as tax revenues. Our estimates indicate that the net economic impacts of the Dream Act for the first group are positive for each level of government as well as for private individuals. In contrast, although the net private benefits and the total net benefits for the second group are also positive, net fiscal impacts for the state and local governments combined are negative. Our estimates of positive net benefits for students who obtain more education because of the Dream Act are expected. It simply means that education is a good investment both for the student and for the economy.

Finally, combining the estimates of the net economic impacts for various levels of government and private individuals associated with the various groups who take advantage of the Dream Act, with estimates of the size of these groups, results in net economic impacts that are large and positive for each level of government as well as for private individuals.

In general, these results are not sensitive to changes in the assumptions made. Specifically, the following results hold under all sets of alternative assumptions that we consider: the total net economic benefits of the Dream Act are always positive and large; total net fiscal benefits to the state government are always positive; and total net fiscal benefits to the federal government are always positive. Under some sets of alternative assumptions, the net fiscal benefits to county governments are negative. That is, the sensitivity analysis suggests that a redistribution of costs between different levels of government may occur with the Dream Act. The Dream Act may result in net fiscal losses for county governments even as state and federal government budgets gain.



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Table 1: Estimated Number of Students in Each Category for One Annual Cohort of Students			
	Estimated Number of Students in Each Category for one Annual Cohort of Students		
<b>A. FOR EACH STUDENT INDUCED BY THE DREAM ACT TO OBTAIN MORE EDUCATION</b>			
<i>High school drop-out without the Dream Act, at least high school graduate with the Dream Act</i>		185	
<i>Does not attend college or university without the Dream Act, with the Dream Act:</i>			
<i>Completes some college but does not obtain Bachelor's degree</i>		89	
<i>Obtains Bachelor's degree from a public university</i>		59	
<i>Obtains an Associate's degree from a public community college without the Dream Act, obtains Bachelor's degree from a public university with the Dream Act</i>		15	
<b>B. FOR EACH STUDENT WHO PAYS LESS BECAUSE OF THE DREAM ACT BUT DOES NOT OBTAIN MORE EDUCATION</b>			
<i>Obtains an Associate's degree from a public community college without the Dream Act, obtains Associate's degree from a public community college with the Dream Act</i>		133	
<i>Obtains Bachelor's degree from a public university without the Dream Act, obtains Bachelor's degree from a public university with the Dream Act</i>		111	
<i>Obtains Bachelor's degree from a private or out-of-state public university without the Dream Act, obtains Bachelor's degree from an in-state public university with the Dream Act</i>		28	

Note: Constructed from Table 1 in Gindling and Mandell (2012)

Table 2: Net Discounted Benefits (+) or Costs (-) Due to the Dream Act for a Single Cohort (millions of 2011 dollars)							
NET DISCOUNTED BENEFITS (+) OR COSTS (-) DUE TO THE DREAM ACT FOR A SINGLE ANNUAL COHORT							
(Benefits of additional educational attainment minus costs of additional schooling)							
Fiscal Net Benefits to State and Local Governments in Maryland							
	Fiscal Net Benefits to State Government	Fiscal Net Benefits to Local Government	Total State plus Local	Fiscal Net Benefits to Federal Government	Total Net Fiscal Benefits (all governments)	Private Net Benefits	Total Net Benefits (Fiscal plus Private)
A. SUBTOTAL FOR STUDENTS INDUCED BY THE DREAM ACT TO OBTAIN MORE EDUCATION	6.0	1.8	7.8	18.4	26.2	31.7	57.9
B. SUBTOTAL FOR STUDENTS WHO PAY LESS BECAUSE OF THE DREAM ACT, BUT DO NOT OBTAIN MORE EDUCATION	-0.4	-1.2	-1.6	0.0	-1.6	10.0	8.4
TOTAL NET DISCOUNTED BENEFITS (+) OR COSTS (-)	5.6	0.6	6.2	18.4	24.6	41.7	66.3

Note: Constructed from Table 6 in Gindling and Mandell (2012)

Table 3: Fiscal Costs and Benefits Due to the Dream Act for a Single Cohort (millions of 2011 dollars)					
Fiscal Costs to State and Local Governments in Maryland					
	Fiscal Costs to State Government	Fiscal Costs to Local Government	Total State plus Local	Fiscal Costs to Federal Government	Total Costs (all governments)
TOTAL DISCOUNTED FISCAL COSTS	3.6	3.6	7.2	0.2	7.4
TOTAL DISCOUNTED FISCAL BENEFITS	9.3	4.2	13.4	18.6	32.0
TOTAL NET DISCOUNTED BENEFITS (BENEFITS MINUS COSTS)	5.6	0.6	6.2	18.4	24.6

Note: Constructed from Tables 3, 4, 5 and 6 in Gindling and Mandell (2012)